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|        |                          |             | ,                            | Application Number               | 10/054,536                                            |  |
| 11     | <b>IFORMATIC</b>         | N DI        | SCLOSURE                     | Filing Date                      | January 22, 2002                                      |  |
| S      | TATEMENT                 | BY A        | PPLICANT                     | First Named Inventor             | Nobutaka Wakamiya                                     |  |
|        |                          |             |                              | Art Unit                         | 1645                                                  |  |
|        | (use as many             | sheets as   | necessary)                   | Examiner Name                    | S. Devi                                               |  |
| Sheet  | 1                        | of          | . 2                          | Attorney Docket Number           | 19036/36614A                                          |  |

|                       |      | ,                                       | U.S. PA          | ATENT DOCUMENTS               |                                          |  |
|-----------------------|------|-----------------------------------------|------------------|-------------------------------|------------------------------------------|--|
| Examiner<br>Initials* | Cite | Document Number                         | Publication Date | Name of Patentee or Applicant | Pages, Columns, Lines,<br>Where Relevant |  |
|                       | No.1 | Number-Kind Code <sup>2</sup> (# known) |                  | of Cited Document             | Passages or Relevant Figures Appear      |  |
| 57                    | A1°  | 5,270,199                               | 12/14/93         | Ezekowitz                     | 1435/240.2                               |  |

|           |      | FORE                                                                              | GN PATENT DO     | DCUMENTS                    |                                          |   |
|-----------|------|-----------------------------------------------------------------------------------|------------------|-----------------------------|------------------------------------------|---|
| Examiner  | Cite | Foreign Patent Document                                                           | Publication Date | Name of Patentee or         | Pages, Columns, Lines,<br>Where Relevant |   |
| Initials* | No.1 | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (it known) | MM-5D-YYYY       | Applicant of Cited Document | Passages or Relevant<br>Figures Appear   |   |
| 40        | B1*  | WO 8901519                                                                        | 02/23/89         |                             |                                          | Т |
| 59)       | B2*  | JP 2-504581 based on WO<br>8901519(Japanese with English<br>Abstract translation) |                  |                             |                                          | 1 |
| 50        | B3*  | WO 98/55614                                                                       | 12/10/98         |                             |                                          | 1 |

|                      | <del></del>  | OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS                                                                                                                                                                                                                                                                                                                    | T . |  |  |  |  |
|----------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|--|--|--|
| Examiner<br>Initials | Cite<br>No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.  Epstein, et al., "The collectins in innate immunity," Current Opinion in Immunology, 8:29-35 (1996). |     |  |  |  |  |
| 57                   | C1*          |                                                                                                                                                                                                                                                                                                                                                                      |     |  |  |  |  |
| .\                   | C2*          | Ezekowitz, R.A.B. et al.; "A Human Mannose-binding Protein is an acute-phase Reactant that Shares Sequence Homology with Other Vertebrate Lectins," J. Exp. Med., 167:1034-1046 (March, 1988).                                                                                                                                                                       |     |  |  |  |  |
|                      | C3*          | Ezekowitz, R.A.B. et al., "Mannose-binding protein and susceptibility to chronic hepatitis B infection," The Lancet, 348:1396-1397 (November, 1996).                                                                                                                                                                                                                 |     |  |  |  |  |
|                      | C4°          | Fujita, T., "Complement activation and Lectin Pathway," Rinsho-Meneki, 29(3):405-410 (1997). (Japanese with English abstract translation)                                                                                                                                                                                                                            | 7   |  |  |  |  |
|                      | C5*          | Garred, et al., "Susceptibility to HIV infection and progression of AIDS in relation to variant alleles of mannose-binding lectin,: The Lancet, 349:236-240 (January, 1997).                                                                                                                                                                                         |     |  |  |  |  |
|                      | C6*          | Kawai, et al., "Cloning and characterization of a cDNA encoding bovine mannan-binding protein," Gene, 186(2);161-165 (February, 1997).                                                                                                                                                                                                                               | -   |  |  |  |  |
|                      | C7*          | Kurata, H., "Structure and Function of Mannan-Binding Proteins Isolated from Human Liver and Serum," J. Biochem., 115(6);1148-1154 (1994).                                                                                                                                                                                                                           |     |  |  |  |  |
|                      | C8*          | Lim, et al., "Primary Structure of Bovine Collectin-43 (CL-43) Comparison with conglutinin and lung surfactant protein-D," J. Biol. Chem., 269(16):11820-11824 (April, 1994).                                                                                                                                                                                        |     |  |  |  |  |
|                      | C9*          | Lipscombe, et al., "Mutations in the Human Mannose-Binding Gene: Frequencies in several population groups," European Journal of Human Genetics, 4(1);13-19 (1996).                                                                                                                                                                                                   |     |  |  |  |  |
| b                    | C10*         | Lu, et al., "Purification, characterization and cDNA cloning of human lung surfactant protein D," Biochem. J., 284:795-802 (1992).                                                                                                                                                                                                                                   |     |  |  |  |  |
| 4                    | C11*         | Malhortra, et al., "Interaction of C1q receptor with lung surfactant protein A", Eur. J. Immun., 22:1437-1445 (1992).                                                                                                                                                                                                                                                |     |  |  |  |  |

| Examiner  | (1)   |                                         | Date       | NANDUL. DE |
|-----------|-------|-----------------------------------------|------------|------------|
| Signature | 1 2 \ | , · · · · · · · · · · · · · · · · · · · | Considered | Novemies   |

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|                                   |                   |      |                                       | Application Number     | 10/054,536        |  |
| 11                                | <b>VFORMATION</b> | 1 DI | SCLOSURE                              | Filing Date            | January 22, 2002  |  |
| STATEMENT BY APPLICANT            |                   |      | APPLICANT                             | First Named Inventor   | Nobutaka Wakamiya |  |
|                                   |                   |      |                                       | Group Art Unit         | 1645              |  |
| (use as many sheets as necessary) |                   |      |                                       | Examiner Name          | S. Devi           |  |
| Sheet                             | 2                 | of   | 2                                     | Attorney Docket Number | 19036/36614A      |  |

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

|        | Examiner<br>Initials | Cite<br>No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.                    |   |
|--------|----------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|        |                      |              | •                                                                                                                                                                                                                                                                                 |   |
|        | 40                   | C12*         | Malhortra, et al., "Glycosylation changes of IgG associated with rheumatoid arthritis can activate complement via the mannose-binding protein," Nature Medicine, 1(3); 237-243 (March, 1995).                                                                                     |   |
|        |                      | C13*         | Matsuda, et al., "Involvement of Mannan Binding Protein with crisis and progression of IgA nephrosis," Journal of Nephrology Association of Japan, 39(3):235 (1997). (Japanese with English abstract translation)                                                                 | 1 |
|        |                      | C14*         | Nepomuceno, et al., "cDNA Cloning and Primary Structure Analysis of ClqR(p), the Human Cl1/MBL/SPA Receptor That Mediates Enhanced Phagocytosis in Vitro," Immunity, 6(2):119-129 (February, 1997)                                                                                |   |
|        |                      | C15*         | Sastry, et al., "The Human Mannose-binding Protein Gene: Exon Structure Reveals its Evolutionary Relationship to a Human Pulmonary Surfactant Gene and Localization to Chromosome 10," J. Exp. Med., 170:1175-1189 (October, 1989).                                               | · |
|        |                      | C16*         | Sumiya, et al., "Molecular basis of opsonic defect in immunodeficient children," Lancet, 337:1569-1570 (June, 1991).                                                                                                                                                              |   |
|        |                      | C17*         | Sumiya, et al., "Mannose-binding protein, genetic variant and the risk of infection," Q. J. Med., 89:723-726 (1996).                                                                                                                                                              |   |
| ••     |                      | C18*         | Super, et al., "Association of Low Levels of Mannan-binding Protein with a Common Defect of Opsonisation," Lancet, 2: 1236-1239 (November, 1989)                                                                                                                                  |   |
| ,      |                      | C19*         | Suzuki et al., :Cloning and Sequencing of a cDNA Coding for Bovine Conglutinin," Biochem Biophys Res Commun, 191/2, 335-342 (1993).                                                                                                                                               |   |
| •      |                      | C20*         | Suzuki et al., "Characterization of Recombinant Bovine Conglutinin Expressed in a Mammalian Cell," Biochem Biophys Res Commun, 238, 856-863 (1997).                                                                                                                               |   |
|        |                      | C21*         | Taylor, et al., "Structure and evolutionary origin of the gene encoding a human serum mannose-binding protein," Biochem J., 262: 763-771 (1989).                                                                                                                                  | · |
|        |                      | C22*         | Thomas, et al., "Mutation of gene for mannose-binding protein associated with chronic hepatitis B viral infection," Lancet, 348: 14176-1419 (November, 1996).                                                                                                                     |   |
|        |                      | C23*         | Uemura, et al., "Correlation Between Structure and Function of Calcium Dependence Animal Lectin on Host Defense," <i>Jikken-Igaku</i> , 13(18) (1995). (Japanese with English abstract translation).                                                                              | 1 |
| _      |                      | C24*         | Wakamiya, et al., "The Mannose Binding Protein and Conglutinin in Bovine Serum Have an Antiviral Activity Against Influenza Virus," Glycoconjugate Journal, 8:235 (1991).                                                                                                         |   |
|        |                      | C25*         | Wakamiya, et al., "Isolation and Characterization of Conglutinin as an Influenza A Virus Inhibitor," Biochem. Biophys. Res. Comm., 187: 1270-1278 (September, 1992).                                                                                                              |   |
|        |                      | C26*         | Wakamiya, et al., "Anti-Viral Activity by Collectin," Rinsho-Meneki, 29(4); 508-513 (1997). (Japanese with English abstract translation).                                                                                                                                         | 1 |
|        | 7)                   | C27          | Eda, et al., "Characterization of Truncated Human Mannan-Binding Protein (MBP) Expressed in Escherichia coli," Biosci. Biotechnol. Biochem., 62(7): 1326-1331 (1998).                                                                                                             |   |
| Duplic | ale                  | C28          | Ma, et al., "Functional Expression of Human Mannan-Binding Proteins (MBPs) in Human Hepatoma Ceti Lines Infected by Recombinant Vaccinia Virus: Post-Translational Modification, Molecular Assembly, and Differentiation of Serum and Liver MBP," J. Biochem. 122:810-818 (1997). |   |
|        | Examine<br>Signature |              | Date Considered NW.05                                                                                                                                                                                                                                                             |   |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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